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EXAMINER

ROSS, DANA

ART UNIT

PAPER NUMBER

3722

DATE MAILED: 03/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,390

Applicant(s)

ALBERT, DONN E.

Examiner

Dana Ross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Faxing of Responses to Office Actions

1. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to Office Actions directly into the Group at (703) 872-9302 or, for responses after final rejection only, to (703) 872-9303. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the examiner.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Reference number 356 in figure 7, reference number 747 in reference 8, reference numbers 403 and 407 in reference 9, reference number 510 in figure 10. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in

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reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: Page 6, line 3, states "drive shaft 240" in reference to figures 6 and 7. It appears this should state "drive shaft 340".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-34, The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim 2 recites the limitation "said power tool" in lines 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 5-7 recites the limitation "said power source". There is insufficient antecedent basis for this limitation in the claim.

Claims 11, 13, 15, the term "or other suitable material" is a relative term which renders the claim indefinite. The term "other suitable material" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of

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ordinary skill in the art would not be reasonably apprised of the scope of the invention. The limitation of the material type has been rendered indefinite.

Claim 20, the term "or other smooth material" is a relative term which renders the claim indefinite. The term "other smooth material" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The limitation of the material type has been rendered indefinite.

Claim 25, 26, 30-32 recites the limitation "said rotational torque". It is not clear which rotational torque is being referred to. There is insufficient antecedent basis for this limitation in the claim.

Claim 26, recites the limitation "said third shaft". There is insufficient antecedent basis for this limitation in the claim. It appears this should be "said third drive shaft".

Claims 31 and 32, recite the limitation "said second shaft". There is insufficient antecedent basis for this limitation in the claim. It appears this should be "said second drive shaft".

The above rejections are not meant to be all-inclusive. Applicant should review all claims to ensure compliance with 35 USC 112 2nd Paragraph requirements.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1-3, and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,664,917 (Judy). Judy teaches a rotating assembly for a lathe comprising a housing, means for attaching the housing to an external drive source and means for transferring rotational movement from the external drive having an output shaft to a cutting wheel wherein the means for transferring rotational movement results in the cutting wheel turning in the same plane as the drive source.(fig. 11, col. 8, lines 31-54).

9. Claim 1-5 and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,187,046 (Atherton). In regard to claims 1-5 and 7-8, Atherton teaches a hand-held assembly for driving a rotating cutter comprising a housing 12 containing a drive shaft 52 extending from a power source having a drive shaft gear 18, first means for transferring rotational torque 90 degrees to a secondary drive shaft 72 which drives a rotating cutter and extending generally perpendicular to drive shaft 52 wherein the rotational torque is transferred to the secondary shaft 72 with a system of bevel gears 68, 70 (col. 4, lines 30-35) and has a means for moving the power source in both the X and Y axes (fig. 7).

In regard to claims 9-13, Atherton teaches all aspects of the above claim 4 rejection. Atherton also teaches the assembly includes a main housing and means for attaching a commercially available grinder to the housing wherein the drive gear has a means for engaging a drive shaft of the grinder (col. 7, lines 27-54) and the gears made of metal (col. 4, lines 8-10).

10. Claims 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,187,046 (Atherton). Atherton teaches an assembly for driving a rotating cutter comprising a housing 12 containing a drive shaft 52 extending from a power source having a drive shaft gear 18, first means for transferring rotational torque 90 degrees to a secondary drive shaft 72 which

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drives a rotating cutter and extending generally perpendicular to drive shaft 52 wherein the rotational torque is transferred to the secondary shaft 72 with a system of bevel gears 68, 70 (col. 4, lines 30-35).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 14-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,187,046 (Atherton) in view of U.S. Pat. No. 5,623,858 (Birkestrand). In regard to claim 14, Atherton teaches all aspects of the claimed invention as described in the above claim 13 rejection. In regard to claims 14, 24 and 25, Atherton teaches an assembly for driving a rotating cutter comprising a housing 12 containing a drive shaft 52 extending from a power source having a drive shaft gear 18, first means for transferring rotational torque 90 degrees to a secondary drive shaft 72 which drives a rotating cutter and extending generally perpendicular to drive shaft 52. Atherton also teaches the use of bevel gears (col. 4, lines 30-37), the cutter spaced from the power source (fig. 1), the cutter in the same plane as the power source (fig. 1), the power source electric (col. 4, lines 1-5). Atherton does not teach an intermediate drive shaft between the drive shaft 52 and drive shaft 72 and parallel to drive shaft 52.

Birkestrand teaches the use of a toothed drive belt assembly that includes two drive shafts that are parallel and transfers torque rotationally (fig. 3, col. 4, lines 1-19).

In regard to claim 15, see above claim 11 and 13 rejections.

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In regard to claim 16, Atherton teaches the cutter shaft and driven gear with matching threads (col. 4, lines 6-29)

In regard to claim 17, Atherton discloses a cutter which inherently has sharpened teeth (col 4, lines 64-67).

In regard to claim 18, Atherton discloses the claimed invention except for the rake angle of the cutter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a rake angle of about 2° to 5° for the purpose of having a precise cut with the cutter teeth, since it has been held that discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In regards to claims 19-21, Atherton teaches a spacer 23 to limit the cutting depth (col. 4, line 60 to col. 5, line 9).

In regard to claim 23, Atherton teaches mechanical fasteners and brace 82, 85, 86 (col. 4, lines 23-29).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the assembly as taught by Atherton to include the toothed drive belt and drive shaft assembly as taught by Birkestrand for the purpose of having varying gear ratios (see Birkestrand, col. 4, lines 6-8).

Allowable Subject Matter

13. Claims 22 and 26-32 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


- U.S. Pat. No. 4,715,752 (Oura)
- U.S. Pat. No. 5,176,478 (Munch)

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is (703) 305-7764. The examiner can normally be reached on Mon-Fri 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

dmr
March 18, 2003


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